



Catalytic Solutions to Reforesting Colorado's Burn Scars

Forests cover over a third of Colorado, providing wildlife habitat, protecting our watersheds, and creating endless opportunities for adventure. Colorado's forests are made of several different tree species, most of which are cone-bearing conifers. TNC focuses its efforts on ponderosa pine, a widespread forest type sensitive to high-severity wildfire. Ponderosa pines adapted with fire, but because of climate change, today's fires are burning more frequently, over larger expanses, and hotter, leaving behind large patches with no surviving cone-bearing trees. Without these trees and the seeds the cones contain, burned ponderosa pine forests are unable to regenerate. In areas unlikely to recover on their own, we are working with scientists and land managers to build capacity to address barriers to reforestation and use innovation to support climate-smart reforestation efforts.

OUR CHALLENGES



High-severity fires have left large areas devoid of a seed source. **Seed collection** is a large barrier to reforestation.



There is an increased demand for the **supply** of native seeds as well as nursery and outplanting services for the reforestation of burn scars.



We must **coordinate** across regional, state, and administrative boundaries to scale up.



We need **new tools and approaches** to increase the scale and pace of reforestation and address gaps in science and knowledge of reforestation best practices.

THE SOLUTIONS



Improve and expand training, seed collection, processing and storage infrastructure.



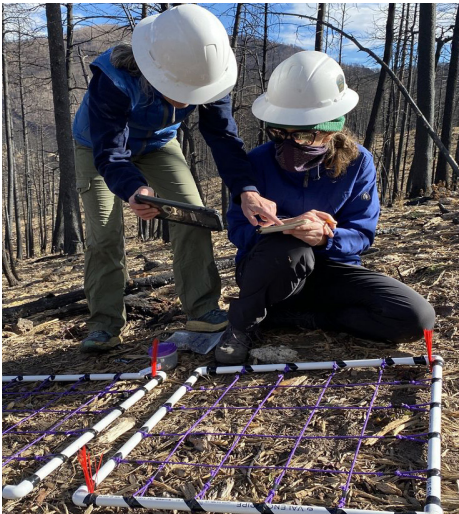
Identify suppliers of collection, processing and storage and connect them to customers on the demand side like public agencies.



Develop large-scale plans with government, private, Tribal, and non-profit organizations to share resources and findings.



Evaluate opportunities for innovation and develop spatial planning tools to identify reforestation sites, particularly for hard to reach sites.



Community of Heroes

The Calwood Fire permanently changed the landscape in 2020 as it burned through 10,000 acres in just a few hours. Over half of the Cal-Wood Education Center's 1,200 acres, where generations of students have explored the forest, were burned.

Cal-Wood's staff quickly started planning for post-fire recovery, welcoming partners to the property to advance knowledge of what works in post-fire environments

given our changing climate. For example, they partnered with TNC to sow native ponderosa pine seeds in areas with no surviving trees. In July 2021, Cal-Wood staff added ponderosa pine seeds to the mulch spread by helicopters on steep slopes. By November, 2-inch-high seedlings were growing, helping advance TNC's work to develop new forest recovery tools. Now, TNC and Cal-Wood are finding more ways to partner, including on their educational and volunteer programs.



THE LIFECYCLE OF SUCCESSFUL REFORESTATION



Planting trees in a burn scar © Ben Prylinski/PrylinskiProductions

FUNDING FOR REFORESTATION

Reforestation must become a shared, and urgent, priority. We must scale up our efforts to meet the need created by recent catastrophic wildfires as well as future fires.

BOLSTER A REFORESTATION ECONOMY

Reforestation work requires specialized expertise that is in short supply. Strategic investments in workforce development and training are needed to address labor shortages across the reforestation supply chain.

RESTORE FORESTS FOR PEOPLE AND NATURE

We must identify and deploy new tools and approaches, otherwise areas burned at high severity without a surviving seed source will transition to grass or shrub lands. Wildlife, local communities, economies, and the freshwater that sustains us all depends on healthy forests.